

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A bipolar transistor suitable for operation as a saturated switch comprising:

- a first semiconductor region of a first conductivity type defining a collector region;
- a second semiconductor region of a second conductivity type defining a base region;
- a third semiconductor region of said first conductivity type defining an emitter region; and
- a metal layer providing contacts to said base and emitter regions;

wherein the emitter region defines a first surface, the base region extending to said surface in locations defined by apertures through emitter region, said metal layer overlying said first surface,

- wherein the bipolar transistor has a specific area resistance less than $500\text{m}\Omega\cdot\text{mm}^2$,
- and wherein the thickness of said metal layer is greater than $3\mu\text{m}$.

2. (Previously Presented) A bipolar transistor according to claim 1, wherein the thickness of the metal layer is no less than $4\mu\text{m}$.

3. (Currently Amended) A bipolar transistor according to ~~any preceding claim~~ claim 1, wherein the thickness of the metal layer is no less than $6\mu\text{m}$.

4. (Cancelled).

5. (Currently Amended) A bipolar transistor according to ~~any preceding claim~~ claim 1, wherein adjacent apertures are spaced less than $100\mu\text{m}$ from each other.

6. (Cancelled).

7. (Previously Presented) The bipolar transistor according to claim 1, wherein an increase in the thickness of the metal layer corresponds to a reduction in the voltage drop in the contacts to said base and emitter regions.

8. (Previously Presented) The bipolar transistor according to claim 7, wherein the reduction in the voltage drop in the contacts is proportional to the increase in the thickness of the metal layer.

9. (Cancelled).

10. (Previously Presented) A method of manufacturing a bipolar transistor, the method comprising:

providing a bipolar transistor including a base region, an emitter region and a metal layer providing contacts to the base region and the emitter region, the bipolar transistor having a specific area resistance of less than 500 mOhms.mm^2 when the metal layer has a thickness of less than $3\mu\text{m}$; and

increasing the thickness of the metal layer to be greater than $3\mu\text{m}$.

11. (Currently Amended) The method according to claim ~~10~~ 10, wherein increasing the thickness of the metal layer to be greater than $3\mu\text{m}$ comprises increasing the thickness of the metal layer to be no less than $4\mu\text{m}$.

12. (New) A bipolar transistor according to claim 2, wherein adjacent apertures are spaced less than $100\mu\text{m}$ from each other.

13. (New) A bipolar transistor according to claim 3, wherein adjacent apertures are spaced less than $100\mu\text{m}$ from each other.

14. (New) A bipolar transistor according to claim 2, wherein the thickness of the metal layer is no less than $6\mu\text{m}$.